

UNIVERSITY OF GONDAR
COLLEGE OF MEDICINE AND HEALTH SCIENCES
INSTITUTE OF PUBLIC HEALTH
DEPARTMENT OF HEALTH SERVICE MANAGEMENT AND
HEALTH ECONOMICS



**NURSING PROCESS IMPLEMENTATION AND ASSOCIATED FACTORS
AMONG NURSES IN WEST AMHARA REFERRAL HOSPITALS, NORTH WEST
ETHIOPIA, 2017.**

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**A THESIS REPORT SUBMITTED TO THE INSTITUTE OF PUBLIC
HEALTH, COLLEGE OF MEDICINE AND HEALTH SCIENCES,
UNIVERSITY OF GONDAR IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC
HEALTH IN HEALTH SERVICE MANAGEMENT.**

June, 2017

Gondar, Ethiopia

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NORTHWEST ETHIOPIA, 2017.

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Acknowledgement

I would like to acknowledge my advisors Professor Amsalu Feleke and Mr Ayal Debie for helping me to conduct this research .

The achievement of this research work would be impossible without the University of Gondar, College of Medicine and Health Sciences, Institute of Public Health , department of Health service management and Health economics help and financial support.

My acknowledgement is also extended to the study participants for giving their valuable time and information for accomplishment of this paper.

I would like to acknowledge my data collectors for their valuable contribution

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Acronyms/ Abbreviation

ADPIE	Assessment, Diagnosis, Planning, Implementation and Evaluation
EHRIG	Ethiopian Hospital Reform Implementation Guideline
IPH	Institute of Public Health
NANDA	North American Nursing Diagnosis Association
NCP	Nursing Care Plan
NDx	Nursing Diagnosis
NP	Nursing Process
WARH	West Amhara Referral Hospitals

ABSTRACT

Introduction: Nursing Process is a systematic problem-solving approach used to identify, prevent and treat actual or potential health problems and promote wellness. It ensures patient safety, decreases the occurrence of patient preventable events, and proactively address problems before they occur. But because of different factors the implementation of the standards is lacking in developing countries, including Ethiopia, more over little is known about the current nursing process implementation status in the West Amhara referral Hospitals.

Objective : The main purpose of this study was to assess implementation of nursing process and associated factors among nurses in west Amhara Referral Hospitals, 2017.

Methods : An institution based cross-sectional study design triangulated with qualitative design was conducted among 388 nurses and 7 key informants from March15-may 15/2017 After proportional allocation of study subjects to each Referral Hospital, both simple random for quantitative and purposive for qualitative sampling techniques were used. pre coded Self administered questionnaires and record review for quantitative data and In depth interview for qualitative data were employed during data collection. Quantitative data was entered by Epi info version7.2 and exported to SPSS version 20 for analysis. Binary logistic regression model was fitted , Both bi-variable and multi-variable analysis were employed. The qualitative data analysis was done using thematic analysis. Ethical procedures were followed during the whole process of research work.

Result: A total of 364 nurses with response rate of 93.8% and 7 key informants were participated in the study. the overall nursing process implementation among nurses in West Amhara Referral Hospitals was found to be **61% (95%CI:56.0-65.9)**. Significant factors that showed positive association were availability of equipments [AOR:4(95%CI:2.01,7.99)],High knowledge[AOR:26,(95%CI:9.38,74.10)], Good supportive supervision [AOR:2.5(95%CI:1.27-5.03)] and newly and timely reporting system [AOR:6.97(95%CI:1.76,27.86)] whereas patient disappearance [AOR:0.44 (95%CI:0.22,0.86)] showed negative association with nursing process implementation.

Conclusion and Recommendations: The overall implementation of nursing process in West Amhara Referral Hospitals found to be low (61%). patient to nurse ratio, availability of basic equipments, knowledge of nurses, supportive supervision and newly and timely reporting system were the associated factors in the area. Hence it is better to strengthen supportive supervision, optimum patient to nurse ratio, updating knowledge, scale up newly and timely reporting systems.

Key words : nursing process implementation, Associated factors, Referral Hospitals

1. Introduction

1.1 Back ground

Nursing process (NP), is an important tool for putting nursing knowledge into practice which increases the quality of nursing care (1). It is a systematic method which utilizes scientific reasoning, problem solving and critical thinking to direct nurses in caring for patients effectively (2). It is also an important approach used to identify, prevent and treat actual or potential health problems and promote wellness. It has five components ; assessment, diagnosis, planning, implementation and evaluation (ADPIE) (3). The first component is assessment, which includes the collection and documentation of both subjective data (history taking) and objective data (vital signs and physical examination).

The second component is nursing Diagnosis which has been defined by North American Nursing Diagnosis Association (NANDA) as a clinical judgment about the patient's responses to actual and potential health problems. The third component of the Nursing Process is planning. It includes prioritizing the patient's problems and diagnoses, formulating goals and desired outcomes for the patient to meet, selecting nursing interventions to enable the patient to meet those goals and writing the nursing orders. The fourth component of the Nursing Process is implementation, it includes determining the nurse's need for assistance, implementing the nursing orders and documentation of nursing actions. The fifth component is evaluation which includes collecting data related to the desired outcomes, comparing the data to see if the patient's goals or outcomes desired were met, evaluating the status of the problem, continuing, modifying or terminating the patient care plan. The evaluation incorporates all input from the entire health care team, including the patient (4) . Patient safety is considered to be one of the direct outcomes of standard nursing care. Patient satisfaction with nursing care is considered an important factor explaining patients' perceptions of service quality. It is important for nurses let patients to express their views of care and incorporate these views in to the provided care (5).

1.2 STATEMENT OF THE PROBLEM

Nursing standards help to ensure that patients are receiving high quality care. It helps for standardization of care, proper documentation, shared responsibility during the patients length of stay, ensure patient safety, decrease the occurrence of patient preventable events, and proactively address problems before they occur, that increases both quality of care and patient satisfaction(5). However, the implementation of the standards is lacking in most of the developing countries, including Ethiopia. As the study reports indicated the level of nursing process implementation is low among different Hospitals in Ethiopia. In Addis Ababa Governmental hospitals 52.1%(4), In Arbaminch General Hospitals, 32.7%(6), In Bale zone hospitals 52% (7). In Debre markose and Finoteselam hospitals showed that the nursing process implementation was 37.1% (8).

There are different factors associated with poor implementation of nursing process in Ethiopia, among those factors shortage of materials, high patient load, knowledge deficit of professionals, unfavorable attitude of professionals (as time-consuming, valueless and inconsistent), lack of monitoring and evaluation and poor documentation were the major contributor for poor nursing process implementation in Ethiopia (9-11).

These problems cause disorganized caring system, conflicting role, Medication error, readmission with similar problems, decrease patient satisfaction, the risk of infectious disease transmission and mortality. But the above problems are preventable if nursing process is implemented properly (4, 12, 13). Despite of these problems there is limitation of studies conducted to assess the implementation level of nursing process and its associated factors among Referral Hospitals in Ethiopia as well as in the study area.

Therefore, in order to ensure the patients quality of care standardized and sustainable nursing care by applying the components of nursing process is required. This standardization and sustainability of care could be achieved by identifying the enabling and disabling factors for nursing care. Thus this study is intended to assess the level of nursing process implementation and to identify associated factors for implementation of Nursing process among nurses in West Amhara Referral Hospitals (WARH).

1.3 Literature review

1.3.1 Nursing process implementation status

Nurses are the largest health care workers in all countries .In order to achieve quality of health care service, quality of nursing care is the key element and to fill this demand application of the nursing process has a significant role, but, in practice, application of the nursing process is not well developed (14). A follow up study done to assess the impact of nursing diagnosis in Greece indicated at base line only 32.5 % of patients had individualized care plan of them only 13 % were based on North American nursing diagnosis association (NANDA). After 6 months follow-up period 82% of cases were diagnosed based on NANDA. the reason behind were poor commitment of nurses and shortage of time (15). The qualitative study in Taiwan identified the following emerged themes from the interview data care plan saves time, hand over report was time consuming and it was not patient centered rather paper work only (16). The principal findings from the study in Swedish were: (1). The Nurses perceived that nursing diagnoses identified the patient's individual needs and thereby enabled them to decide on more individualized interventions, (2) nursing diagnoses were found to facilitate good relationship between colleagues concerning patient care and thus promoted continuity of care and saved time and (3) that nursing diagnoses were perceived to increase the Nurse's reflective thinking leading to a sustainable development of professional knowledge (17). The other study in Kuwait shows that documentation was one of The most common nursing activities that nurses were failed to complete (18). Patients experiences are a reflection of what has happened during the care process, as the study in South Africa showed patients have negative experiences concerning the practices by health care providers (19).

The study report in Brazil showed Nursing records and physical examination were included in over 90% of them. Nursing diagnosis was not found in any of the records. Among the steps performed, prescription was the least frequent. Evolution of the case was described in over 95% of the records(20). A study in Nigerian hospitals, nursing process implementation level was 73,6% (21).

As the study reports indicated the level of nursing process implementation is low among different Hospitals in Ethiopia. As a study in Addis Ababa Governmental hospitals showed 52.1 % of participants have implemented nursing process (4). Whereas in Arbaminch General Hospitals, 32.7% have implemented nursing process (6). In Bale zone hospitals among nurses 52% were implementing nursing process (7). The result from a study of Debremarkose and Finoteselam hospitals showed that the nurses implementation of nursing process was at various degree of consistency 37.1% of participants have very good practice to nursing process , 50% practiced somewhat and the rest 12.9% not at all implemented nursing (8).

1.3.2 Associated factors for nursing process implementation

Nurses tended to match patient conditions to the designated nursing diagnoses, be familiar with statements of related factors, use objective data to describe patient conditions, dutifully check interventions without always executing them, and choose the same evaluation to meet hospital requirements (10)

1.3.2.1 Socio demographic factors

Regarding socio demographic factors affecting implementation of nursing process in Addis Ababa governmental hospitals, from those implemented nursing process 61% were females. From binary logistic regression analysis being a female were significantly associated with implementation of nursing process than male p-value 0.023 (4). Work experience less than 4 years was significantly associated with poor nursing process implementation at Debremarkose and Finoteselam hospitals at p-value 0.000 (8).

1.3.2.2 Organizational factors

The study conducted in American Washington, to examined the effect of patient-to-nurse staffing ratios on mortality rates and the quality of patient care in hospitals, as well as nurse recruitment and retention shown that higher patient-to-nurse staffing ratios were associated with higher mortality rates and greater incidence of medical complications and errors, lower job satisfaction, and more burnout among nurses.

The survey data demonstrated that nurses view understaffing as a serious problem when it comes both to the quality of care that patients receive and to nurse burnout.

59% hospital nurses say that the staffing level at their hospital was having a negative impact on the quality of care . Fifty four percent believed that when it comes to the quality of care, understaffing at their hospitals was a very serious problem,. and Med-Surg nurses with higher patient-to-nurse ratios (more than five to one) are especially likely to agree. When it comes to nurse burnout, fully three in five (62%) nurses have considered leaving the patient-care field during the past two years, and Med-Surg nurses with higher patient-to-nurse ratios are more likely than average to have considered leaving the patient-care field(22)

The availability of working materials is necessary for proper implementation of nursing process but there is scarcity of materials in Ethiopia, as the study participants in Mekele zonal Hospitals said only 25.5% of them responded as adequate (14). In a study from Addis Ababa governmental hospitals 25% of respondents were anxious from high patient load, From the total respondents 54.2% of them said the dissatisfying aspect of their job was caring many patients followed by non participatory decision making (41.1%). new reporting system 16.1%. Regarding patient care 40.6% of nurses have cared for more than 15 patients per day and 22.5% were cared for 10-15 patients per day while 26.6% have cared for 5-10 patients per day and only 5.7% were cared for less than 8 patients per day. Seventy seven point one percent of respondents have worked eight hours per day whereas 7.3% have worked more than 12 hours per day. Around eighty two percent of the respondents were worked overtime. but majority 94.3% of them were not satisfied with the payment (4). According to the study in Arbaminch general hospital 42.85% of respondents were anxious in working time due to high patient load, 11.22% were from management problem. Stressful working place is significantly associated with poor nursing process implementation(2).

1.3.2.3 Professional related factors

Systematic review in Iran showed different challenges in implementation of the nursing process. Intangible understanding of the concept of nursing process, different views of the process, poor knowledge and awareness among nurses related to the implementation of process, supports of managing systems, and poor documentation of nursing process were the main challenges that were clarified from review of literatures (23). The other systematic review identified knowledge deficit,

unpreparedness of professionals, lack of man power and material resources were among pointed out difficulties for nursing care (24).

Most of the Nurses in Turk (65.9%) believed that the nursing process was necessary and regarding their knowledge, half of the nurses answered the diagnosis related questions, 58.3% explained the planning related questions, 41.3% answered questions related to the implementation, and 43.6% explained the evaluation related questions sufficiently (1). The other study in Greece also showed that among participants only 36.8% have knowledge about nursing process implementation in clinical practice (15).

A large percentage of nurses in Nigeria Hospital A (55.7%) did not state the five phases correctly followed by Hospitals C (34.8%) and B (28.1%) nurses respectively. Appreciable percentage of nurses (24.6%) in Hospital B did not demonstrate good knowledge of the steps of the nursing process (21). The study Ogbomso town, oyo state, southern Nigeria identified knowledge had high association whereas attitude had little association for nursing process implementation (25).

Regarding the knowledge and attitude assessment of nurses in Addis Ababa governmental hospitals majority of respondents 91.1% have answered correctly about nursing process related questions. Highly knowledgeable nurses were 27 times more likely and significantly associated with implementation of nursing process than low knowledgeable group of nurses $P\text{-value} < 0.001$. Moderately knowledgeable nurses were positively and significantly associated with implementation of nursing process at $P\text{-value} < 0.001$. Some of the respondents have no good attitude towards nursing process implementation 20.8% of them said useless paper (4). As the study in Mekele zonal hospitals addressed 99.5% of the respondents have a positive attitude towards the nursing process during key informant interview, All interviewee in the qualitative study agreed that nursing process will improve patient care (14). In Arbaminch general Hospital highly knowledgeable nurses were 8.78 times more likely to implementation of nursing process than nurses who were not knowledgeable (2).

1.3.2.4 Patient related factors

In Arbaminch 35.7% of respondents were challenged to provide their nursing care due to patients inability to collect the required material for care provision. In addition to

inability to collect materials, early discharge, not co-operative were significantly associated with poor nursing process implementation(2). Early discharge was also the challenging factor for nursing process implementation in Addis Ababa 39.1% of respondents believed that patients discharged before completing their treatment and came back to their institution with a complicated problem which was difficult to manage (4). An explanatory Study on the Concept of Nursing Process showed that Five main categories were drawn from the data including informed consent, patient-centered relationship, comprehensive participation, and accountable encounter. Constructed interaction, shows that effective nurse-patient interaction enhances cooperation, coordination, and collaboration in caring and improves nursing outcomes (26).

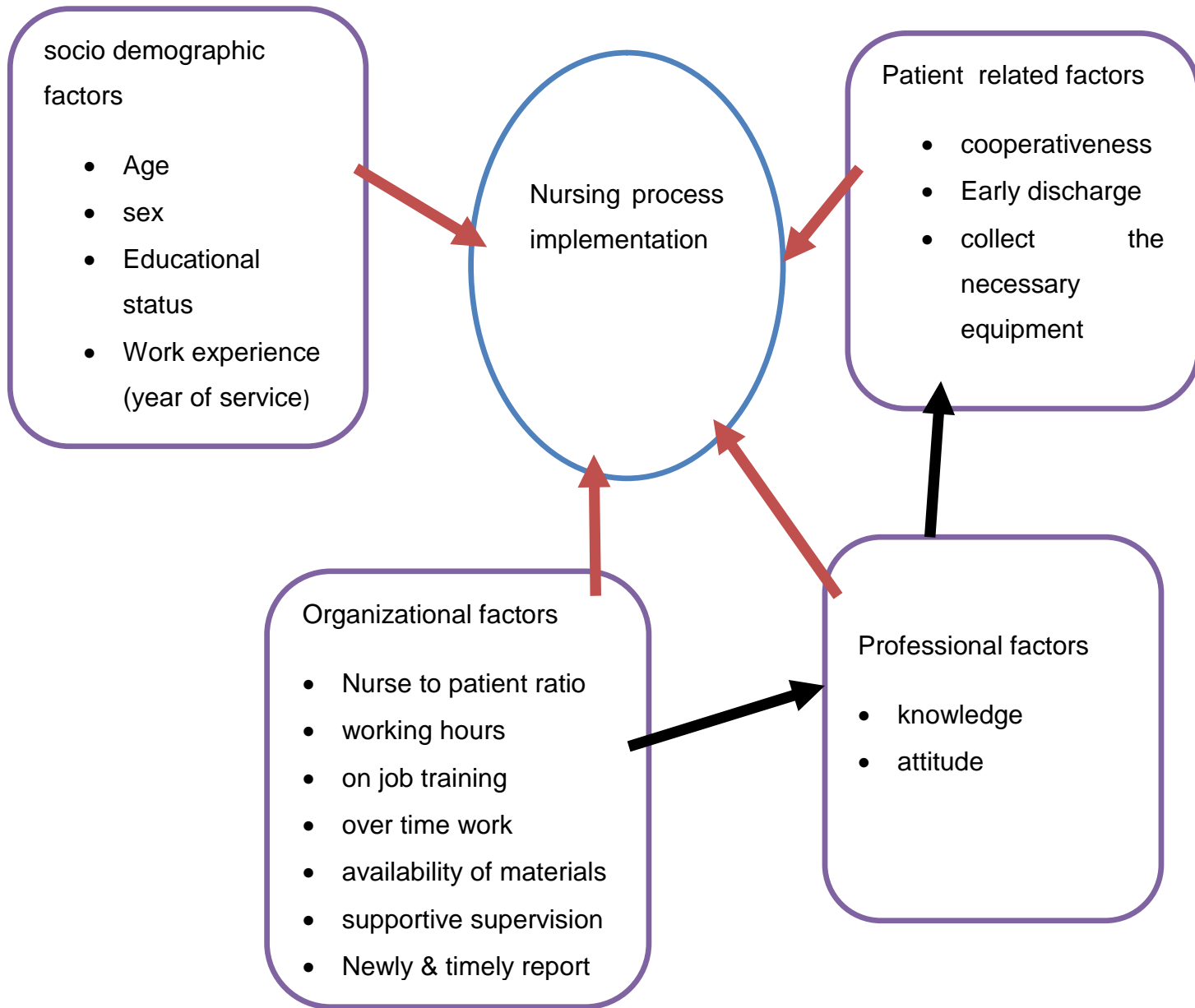


Figure1: Conceptual frame work of Nursing process implementation among west Amhara Referral Hospitals developed by referring different sources : 2017

1.4. JUSTIFICATION

The highest segment of health professional in all countries are nurses .In order to achieve quality of health care service, the quality of nursing care is the key element and to fill this demand application of the nursing process has a significant role, but, in practice, application of the nursing process is not well developed and the cause of these poor implementation of nursing process is not well studied among Referral Hospitals in Ethiopia.

In Referral hospitals advanced procedures have been performed ,after these procedures patients need critical and standardized care these cares are done by nurses. Thus this nursing care should be supported by research findings. however there was limitation of study done before specifically for Referral Hospitals in Amhara National Regional state. As my knowledge is concerned most studies done related to nursing process in Ethiopia were focused on quantitative studies only, but they should have to triangulated with qualitative studies. Those researches done before were used self administered questionnaire to measure nursing process implementation such type data collection method may have response bias.

Therefore present study is designed to assess the level of nursing process implementation and associated factors among nurses in West Amhara Referral Hospitals using quantitative cross-sectional study supplemented with qualitative design. Data were collected by record review in addition to self administered questionnaire to fill the gaps of studies conducted before and the findings of this study may provide a valuable information to improve nursing process implementation. It may also serve as baseline evidence for nursing decisions made by nursing co-coordinators, hospital managers and policy makers more over it may be used as a baseline information for other studies.

2. OBJECTIVES

2.1 General Objective

The General objective of this study is to assess nursing process implementation and associated factors among nurses in West Amhara Referral Hospitals, Northwest Ethiopia, 2017.

2.2 Specific Objectives

To determine nursing process implementation level among nurses in west Amhara Referral Hospitals, Northwest Ethiopia, 2017.

To identify factors associated with implementation of nursing process among nurses in west Amhara Referral Hospitals, Northwest Ethiopia, 2017.

3. METHODS

3.1 Study Area and period

This study was conducted among west Amhara Referral Hospitals, namely university of Gondar referral Hospital, Felegehiwote Referral Hospital, Debre markose Referral Hospital from March - May 2017. West Amhara is located in Amhara Region, Northwest part of Ethiopia. Bahirdar is 322kms far from Addis Ababa, capital city of Ethiopia. West Amhara has three Referral Hospitals which are expected to give service for more than 10 million people. Total number of nurses found in the three Referral Hospitals were 900. These nurses are expected to do Nursing care by applying the five steps of Nursing process implementation these are assessment, diagnosis, planning, intervention and evaluation.

3.2 Study Design

An institutional based cross-sectional quantitative study supplemented with qualitative design was used.

3.3 Sources population

All nurses working in West Amhara Referral Hospitals were the source population of the study.

3.4 Study population

Nurses who were working at inpatient department of west Amhara Referral Hospitals were the study population for this research.

3.5 Inclusion and exclusion criteria

Inclusion criteria

Nurses working at inpatient department of West Amhara Referral Hospitals and available during data collection period were included in the study.

Exclusion criteria

Nurses having less than 6 months work experience were excluded from the study.

Nurses who were assigned at in patient emergency department were excluded from the study.

3.6 Sample size determination

The sample size for quantitative study was determined using both single population and double population proportion formula. For single population proportion sample size was determined by precision approach with $p=37.1\%$ taken from a study in Debre markose and Finoteselam Hospitals (8) and with the assumption Z =standard normal distribution with CL 95%, level of significance= 0.05 and maximum tolerable error $=d=0.05$

$$n = (Z / 2)^2 (p(1-p)/d^2$$

n = number of study participants, $Z / 2$ = the corresponding z-score level at 95% CL =1.96

p = population proportion =0.37 taken from Debre markose and Finoteselam hospitals.

$= 0.05$ = level of significance, $d = 0.05$ = maximum tolerable error

$$n = (1.96)^2 \times 0.37(1-0.37)/(0.05)^2$$

$$= 3.84 \times 0.23/0.0025 = 353+10\%(\text{contingency})$$

$$n = 388$$

Table 1 :- Sample size determination using statically significant factors taken from Debreworkose & Finoteselam Hospitals, 2017

Variables	Frequency		Total	Proportion	Sample size for the second objective
Availability of necessary equipment	Yes 42	No 82	124	0.34	88
Training	34	90	124	0.27	44
Patient cooperativeness	23	101	124	0.19	24
Knowledgeable	72	52	124	0.58	294

NB. the above sample sizes were calculated with the assumption of CL =95% , power =80% and Ratio =1

The maximum of the three factors was 294 therefore $n = 294 + 10\%(\text{contingency}) = 323$ but n by precision =388 therefore the minimum required sample size = the maximum = 388

The total sample size for qualitative data was 7

3.7 Sampling technique

purposive sampling was used to select study participants for qualitative part.

The sampling technique for quantitative part is showed on the following diagram.

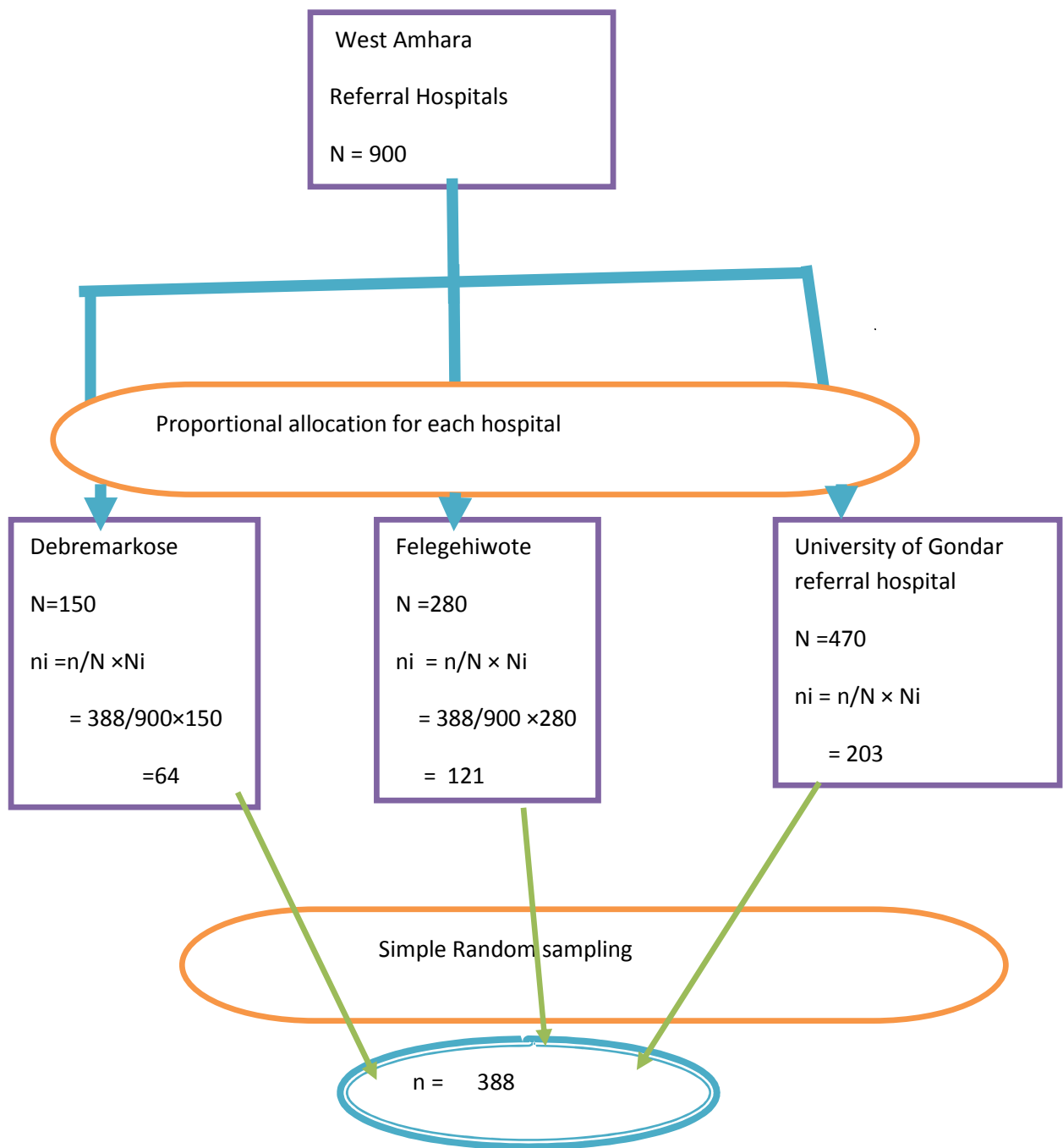


Figure 2:- Schematic presentation of the sampling procedure for nursing process implementation among nurses in west Amhara Referral Hospitals, 2017.

3.8 Variables of the study

Dependent variable

- Nursing process implementation

Independent variables

- socio demographic variables: age, sex, educational level, income, work experience)
- organizational related factors: Availability of basic equipments, supportive supervision, on job training ,newly and timely reporting system, working time, overtime work, patient to nurse ratio
- professional related factors : knowledge ,Attitude
- patient related factors : disappearance, patient cooperativeness, patient ability to collect the necessary equipments

3.9 Operational definition

Nursing process implementation:

- **Implemented:** If the nurse performed and documented nursing process components these are, Nursing assessment, nursing diagnosis, nursing care plan, Nursing intervention and evaluation.
- ✓ **Nursing assessment:** should contain both subjective and objective data of the patient.
- ✓ **Nursing diagnosis (NDx);**- the diagnosis has to be developed based on problem+ Etiology + sign/symptom or problem +Etiology.
- ✓ **Nursing care plan (NCP) :** Nursing care plan should be developed based on nursing diagnosis , **Intervention :** If NCP is implemented it is considered as nursing intervention is done
- ✓ **Evaluation :** if the outcome of the patient is evaluated and documented (11).
- **Patient nurse ratio:** The proportion of a nurse to patients
- **Knowledge :** The ability of nurses to answer questions related to nursing process highly knowledgeable Answers > 80 % , Moderately Knowledgeable Answers 60% - 80 % , Poor knowledge Answers < 60% of questions (8).
- **Attitude :** individuals perception about nursing process implementation 50 % and above agree, it is attitude favorable less than 50% it is considered as unfavorable attitude (14).

3.10 Data collection tools and procedures

The data was collected using both quantitative and qualitative data collection techniques. For quantitative part data were collected with pre coded self administered questionnaire and record review using data extraction check list. The checklist was adopted from Ethiopian Hospitals Reform Implementation Guide Line relevance to nursing standard and the questionnaire was developed from different literatures. For qualitative data the principal investigator was conduct the in depth interview for each of key informants. Guiding questions were used for an in depth interview by arranging comfortable time and place for key informants. In depth interview was employed for about 10 to 20 minutes for each key informant. The interview was recorded using tape recorder and note has been taken then transcription through listening the recorded tape was done.

3.11 Data quality control

For quantitative data quality control, pre-test was done on 10% of sample participants at DebreTabor Hospital. A total of 6 Bsc holder nurses were trained for one day about data collection and data handling, closed supervision by investigator has been done until data collection time ends whereas for qualitative part the data was collected by principal investigator, tape recorder and note has been taken finally data was translated.

3.12 Data processing and Analysis

For quantitative part after checking the completeness of the data , data entry was done by Epi info 7 and exported to SPSS version 20 for cleaning ,merging and analysis, Descriptive statistics was performed on mean, median; range and percentage of dependent and independent variables. Bi-variable logistic analysis was used to identify statistically significant independent variables and variables having p-value less than 0.2 and variables considered as significant from other literatures were analyzed using multi- variable analysis, and the qualitative data was analyzed thematically.

3.13 Ethical consideration

Ethical clearance was obtained from the institutional review board of university of Gondar on behalf of the Ethical review committee of University of Gondar College of Medicine and Health Sciences ,Institute of Public Health. Before the beginning of data collection, permission letter was obtained from Amhara National Regional state Health Bureau and from each Referral Hospital's Administration for data collection. After that informed consent was taken from each study participants.

4. RESULTS

4.1 Socio demographic characteristics :

A total of 364 nurses with response rate of 93.8% were participated in this study. From all respondents 52.2% were males, 76.9% were 21-30 years old, the median(IQR) age of respondents was 28 (26-30),192 (52.7%) were married, 211 (58%) were having 6 months to 4 years of work experience and 311 (86.5%) were first degree holders.

Table 2:- Socio demographic characteristics nurses in West Amhara Referral Hospitals, North west Ethiopia,2017

No	Characteristics		Frequency	percentage
1	Sex	Male	190	52.2 %
		Female	174	47.8 %
		Total	364	100 %
2	Age in year	21-30	280	76.9%
		31-40	66	18.1%
		40	18	5%
3	Marital status	Single	151	41.5%
		Married	192	52.7%
		Others	21	5.8%
4	Work experience in year	6 mon-4 yrs	211	58%
		5-9	104	28.4%
		10-14	25	6.9%
		15	24	6.6%
5	Educational status	Diploma	29	8 %
		First degree	315	86.5 %
		Second degree	20	5.5 %
		Total	364	100 %

4. 2 Organizational related factors

In this study good supportive supervision was found to be 59.1% ,219 (60.2%) of study participants reported their working time 8 hours , the 66.2% of nurses were assigned for 10 patients and about 69.5% of respondents reported the necessary equipment were available for patient care.

Table 3 : Organizational factors that affect Nursing process implementation among nurses in west Amhara Referral Hospitals, Northwest Ethiopia, 2017.

Characteristics			Frequency	percentage
Patient to Nurse Ratio(median)	10		241	66.2%
	>10		123	33.8%
Working hour(Ethiopian civil service)	8 hrs		219	60.2%
	>8hrs		145	39.8%
Availability of equipments	Available		250	69.5%
	Not available		114	30.5%
Over time work	Yes		320	87.9%
	No		44	12.1%
Dissatisfying aspect of the work based on nurses perception	Caring so many patients	Yes	165	45.3%
		No	199	54.7%
	New reporting system	Yes	87	23.9%
		No	277	76.1%
	Decisions made without staff involvement	Yes	187	51.4%
		No	177	48.6%
	Poor communication with co-workers	Yes	64	17.6%
		No	300	82.4%
The greatest challenge of nurses on work place based on nurses perception	Poor relationship with physicians and other staffs	Yes	184	50.5%
		No	180	49.5%
	Due to autocratic type of management	yes	194	53.3%
		No	170	46.7%

Level of supportive supervision	poor	149	40.9%
	Good	215	59.1%
On job training given	Yes	147	40.4 %
	no	217	59.6 %
Orientation given	yes	170	46.7 %
	no	194	53.3 %

4. 3 Professional related factors for Nursing process implementation

4.3.1 Knowledge **assessment**:

Among 364 study participants 97(26.6%) has poor knowledge,179(49.2%) were moderately knowledgeable and 88(24.2%) were highly knowledgeable.

Table 4: Knowledge of nurses on nursing process implementation among nurses in west Amhara Referral Hospitals, Northwest Ethiopia, 2017.

No	Character	Correct answer No(%)	Incorrect answer No(%)
1	First step of nursing process identification	322(88.5%)	42 (11.5%)
2	Gordon approach primary goal understanding	72 (19.8 %)	292(80.2%)
3	Component of nursing process identification	324 (89 %)	40(11%)
4	Understanding for types of nursing diagnosis	231 (63.5%)	133(36.5%)
5	Nursing diagnosis and medical diagnosis differentiation	290 (79.6%)	74 (20.3%)
6	Recognize the mandatory of nursing process accomplishment	207 (56.9%)	157 (43.1%)
7	Understand nurses role during implementation phase of nursing process	216 (59.3%)	148 (40.7%)
8	Identification for the indications of nursing process evaluation	202 (55.5 %)	162 (44.5%)
9	Ability to differentiate the problem, etiology and evidences in actual nursing diagnosis	235 (64.6%)	129 (35.4 %)
10	Ability to write complete nursing diagnosis/ based on NANDA	187 (51.4 %)	177 (48.6 %)

4.3.2 Attitude of nurses working among west Amhara Referral Hospitals.

Based on quantitative finding 306 (84.1%) of respondents have favorable attitude for nursing process whereas the rest 58 (15.9%) has unfavorable attitude.

Table 5: Attitude of nurses working in west Amhara Referral Hospitals, Northwest Ethiopia,2017.

No	Characters	St. disagree		Disagree		Neutral		Agree		St. Agree	
		No	percent	No	percent	No	percent	No	percent	No	Percent
1	Nursing process should be used for all admitted patients	82	22.5%	33	9.1%	8	2.2%	26	7.1%	215	59.1%
2	Nursing process will work if applied in patient care	58	15.9%	27	7.4%	17	4.7%	33	9.1%	229	62.9%
3	The current Nursing process format is time consuming	68	18.7%	65	17.9%	19	5.2%	67	18.4%	145	39.8%
4	Nursing care plan should be revised depending on the patient's condition	113	36.3%	19	5.2%	12	3.3%	23	6.3%	178	48.9%
5	Feedback about nursing process will bring improvement	54	14.8%	29	8.0%	17	4.7%	35	9.6%	229	62.9%
6	Work related problems affect nursing process	56	15.4%	39	10.7%	7	1.9%	50	13.7%	212	58.2%
7	Nursing process is valueless paper work	57	15.7%	195	53.6%	22	6.0%	18	4.9%	72	19.8%
8	Practice of nursing process improves patient care	89	24.5%	34	9.3%	6	1.6%	34	9.3%	201	55.2%

4.1.4 Patient related factors

Regarding patient related factors, among respondents 54.7% reported patient disappearance influenced their nursing process implementation, 41% said patients come with complicated cases which is difficult to manage, 29.7% said patients are not cooperative for nursing care and 27.2% said patients were unable to collect the required materials.

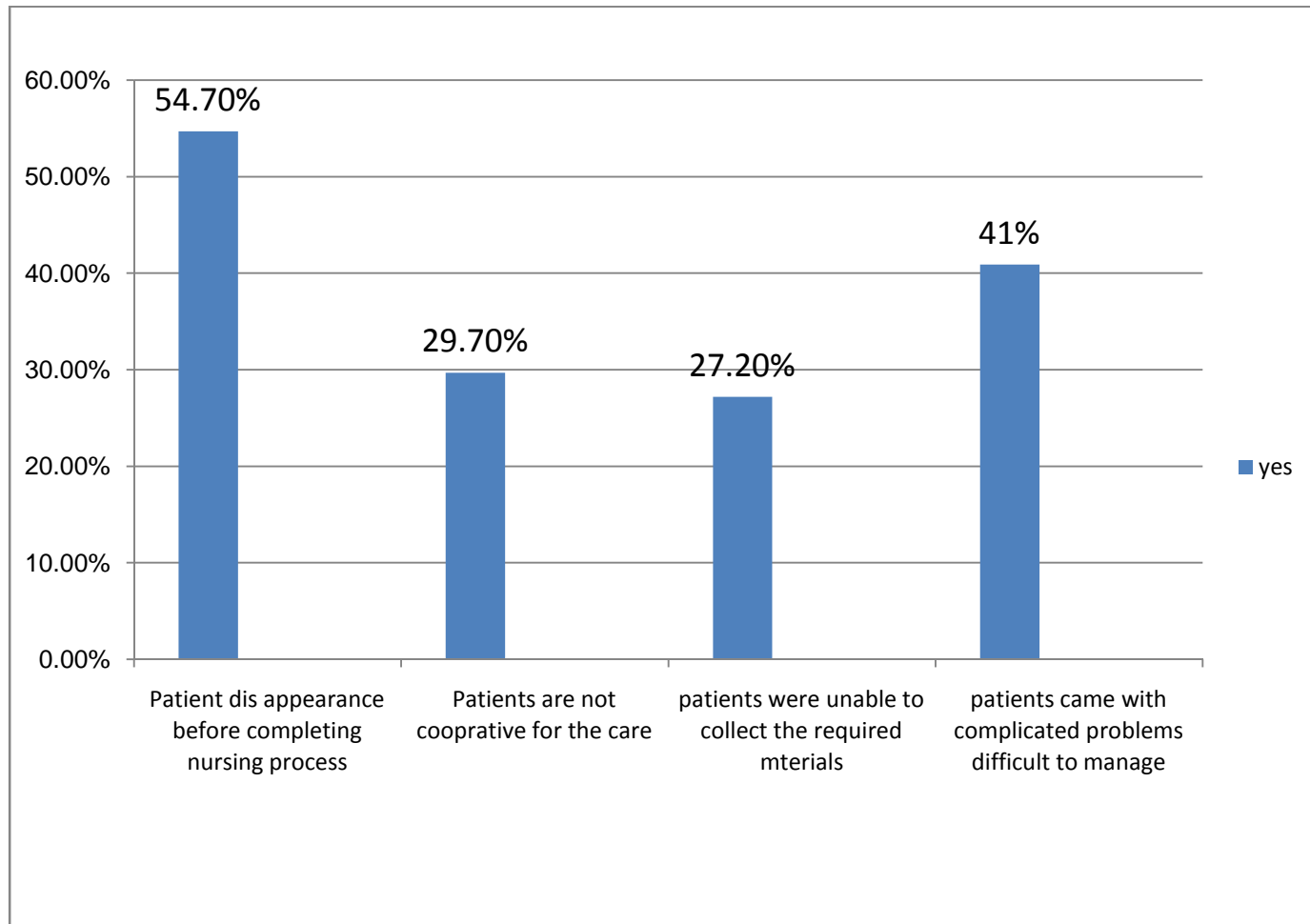


Figure 3: Patient related factors for nursing process implementation among nurses in West Amhara Referral Hospitals, Northwest Ethiopia, 2017.

Level of Nursing process implementation among nurses working in West Amhara Referral Hospitals.

Among the respondents 275 (75.5%) have implemented the assessment phase of nursing process, 246 (67.6%) developed nursing diagnosis based on NANDA, 230 (63.2%) of respondents planned the already developed nursing diagnosis, of 364 study participants 235 (64.6%) implemented their plan and 224 (61.5%) of study participants performed the evaluation phase of nursing process. In this study, the overall implementation of nursing process among nurses working in WARH was found to be **61% (95%CI :56.0-65.9).**

Among respondents majority 186 (51.1%) were from university of Gondar Referral hospital followed by Felegehiwote referral Hospital 114 (31.3%) and Debremarkose referral Hospital 64 (17.6%).

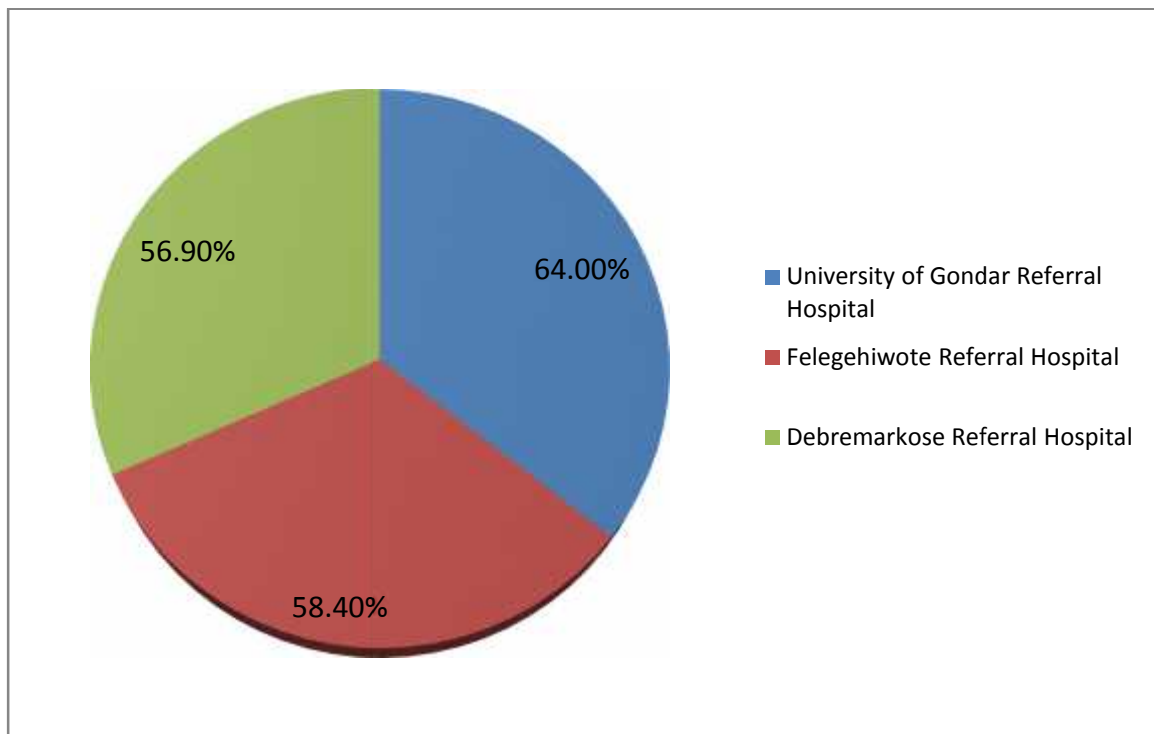


Figure 4: Magnitude of nursing process implementation among nurses at each Referral Hospital of West Amhara Referral Hospitals, Northwest Ethiopia, 2017.

Factors that affect nursing process implementation level

Variables having p-value less than 0.2 during the bi - Variable analysis in the current study and variables considered as significant from other literatures were analyzed; and the multivariable analysis indicated that there were six variables that showed statistical significant with the implementation of nursing process by nurses working in West Amhara Referral Hospitals.

Availability of basic equipment showed statistical significance with implementation of nursing process in that the odds of implementing nursing process among nurses working in a unit with availability of basic equipments were [AOR: 5.39 (95%CI: 2.55,11.38)] times higher as compared to nurses working in a unit with shortage of basic equipments

Nurse-patient ratio is another factor that showed statistical significance with nursing process implementation in that the odds of implementing nursing process among nurses who served less than 10 patients were [AOR: 3.67 (95%CI:1.72,7.82)]. times higher as compared to those cared more than 10 patients. From the in-depth interview, it was revealed that nurses were loaded by patient flow to implement nursing process. Nursing process implementation requires optimal patient to nurse ratio. appropriate patient to nurse ratio reduces work load, ensures patient safety and increases staff satisfaction. majority of the key informants said that it is difficult to perform nursing process by the current patient to nurse proportion. A 28 years old male head nurse explained" *... only 2 nurses are assigned for 28 patients at weekend and night in my ward because of this we are not implement nursing process at this time.*" the other 33 years old female key informant said " *... the problem is the flow of patients and number of nurses are totally mismatched due to this ,nurses become burnout, patient dissatisfaction and sometimes medication error is occurred .*"

Having supportive supervision in the work environment also showed statistical significance with nursing process implementation in which the odds of implementing nursing process among nurses Who have been working in a unit with good supportive supervision were [AOR:3.217(95%CI:1.55,6.68)] times higher compared to nurses who have been working in the area with poor supportive supervision. The qualitative

result showed supportive supervision was important for nursing process implementation. Almost all key informants confirmed there was establishment of nursing process committee and three times per week evaluation systems as supportive supervision mechanisms. A 35 years old male head nurse said " *...our supervision system is continuous and follow two way communication principle which is more constructive and motivates our staffs thus we simply identify the weakness and strength of each worker and support based on their need.*"

Reporting system of the nurse's working place also another factor that showed statistical significance with nursing process implementation in that the odds of implementing nursing process among nurses working in units that have new and timely reporting system were [AOR: 3.58 (95%CI: 1.20, 11.61)] times higher as compared to nurses working in work places which has no new and timely reporting system. From in depth interview it was identified that Hospitals have weekly, monthly, quarterly, midyear and yearly reporting systems for nursing process implementation. most key informants explained newly and timely reporting system was important for nursing process implementation. One BSc head nurse said "*... as a team leader I used it as an alarm because it makes me to complete my work timely and reduces negligence.*" the other key informant said "*... it solves the problem at early stage before it becomes the problem of the organization; it increases accountability and responsibility of professionals.*"

The odds of implementing nursing process among nurses with high knowledge on nursing process were [AOR:20.409 (95%CI:7.23,57.60)] times higher as compared to nurses with poor knowledge on nursing process whereas the odds of implementing nursing process among nurses with moderate knowledge on nursing process were [AOR: 10.85 (95%CI:4.679,25.159)] times higher as compared with nurses having poor knowledge on nursing process.

In the in depth interview, it was revealed that nurses lack adequate knowledge to implement nursing process. The implementation of nursing process requires scientific knowledge, clinical problem-solving skills and positive attitudes towards nursing

process. Scientific knowledge facilitates critical thinking skills that are appropriate to nursing process practice. Majority of key informants said that it is difficult to put nursing process in practice depending on the current knowledge of nurses on nursing process. As 33 years old Degree holder head nurse described *"...still the quality is under question mark because to do nursing process knowledge is required about nursing process implementation there are nurses who cannot differentiate even actual nursing diagnosis and potential nursing diagnosis."*

The odds of having implemented nursing process among disappeared patients were reduced by 61.7% as compared with patients stayed until nursing process completed[AOR: 0.38 (95%CI:0.18,0.81)].

un clarity and bulkiness of nursing process format

From the in depth interview it explored that un clarity and bulkiness of the format affected nursing process implementation . nursing process implementation needs clear and précised format. As most of study participants explained the format was not clear for nurses to implement nursing process . A 34 female head nurse said *"...the first three page of the format are not necessary rather it wastes our time simply it talks around the bush not the patient current problem"*

Table 6 : Association of variable with Nursing process implementation using bi variable and multivariable logistic regression among nurses working in west Amhara Referral Hospitals, Northwest Ethiopia,2017. (n=364)

Characteristics		Nursing process implementation		COR 95%CI	AOR(95%CI)
		n			
		Yes	No		
Availability of basic equipment	Yes	192	58	9.269(5.57,15.43)	5.39(2.55,11.38)
	No	30	84	1	1
Non Autocratic style of management	Yes	140	37	4.85(3.05,7.70)	1.95(0.98,3.85)
	No	82	105	1	1
Patient nurse ratio (median) IQR (7-12)	<10	178	63	5.073(3.18,8.10)	3.67(1.72,7.82)
	>10	44	79	1	1
Decisions made with staff involvement	Yes	140	37	4.845(3.05,7.70)	1.915(0.92,3.97)
	No	82	105	1	1
Level of supportive supervision	Good	165	50	5.326(3.37,8.42)	3.217(1.55,6.68)
	Poor	57	92	1	1
On job training	Yes	108	39	2.502(1.59,3.94)	3.217(0.85,3.69)
	No	114	103	1	1
The new reporting system	Yes	81	6	13.021(5.499,30.835)	3.58(1.20,11.61)
	No	141	136	1	1
Knowledge level of nurses	Poor	20	77	1	1
	Moderate	127	52	9.403(5.221,16.934)	10.85(4.68,25.16)
	High	75	113	22.21(10.31,47.84)	20.41(7.23,57.60)
Pt disappearance	Yes	102	97	0.39 (0.25,0.61)	0.383(0.18,0.81)
	No	120	45	1	1
Pt's complicated problems	Yes	74	75	0.45(0.29,0.69)	0.74(0.35,1.56)
	No	148	67	1	1

5. DISCUSSION

This study tried to address the level of nursing process implementation and associated factors among nurses working in west Amhara Referral Hospitals, Northwest Ethiopia.

The level of nursing process implementation was found to be **61.% (95%CI: 56.0-65.9)** among nurses in west Amhara Referral Hospitals. This result was higher as compared with other similar studies in Ethiopia, Addis Ababa Governmental hospitals (52%)(4), Debre markose Referral & Finoteselam district Hospitals (37.1%)(8), Arbaminch General Hospitals (32.1%)(2) Bale Zone General Hospitals (52%)(7) The possible explanation for the difference could be study setting, the previous studies were conducted among primary and General Hospitals in that the patients may not be severely ill and might be discharged early and the severely ill patients might be Referred to Referral Hospitals whereas in Referral Hospitals most patients are referral cases that needs more intensive care , advanced procedures are performed , most patients need palliative care and patient length of stay also increased due to these reasons the chance of implementing nursing process also increased in Referral Hospitals.

In the contrary this finding was lower than with the study report in Greece (82%)(15), the study report in Brazil showed that nursing process documentation was 82% (27), in Nigerian Hospitals (73.6%) (21). This variation could be due to method difference, In Greece the study was follow up study, since nursing process implementation is a process chance of implementing the component in follow up study is likely increased. difference in patient to nurse proportion: the average patient to nurse proportion in high income country is 8 times greater than low income countries(4) this implies that disproportion of patient to nurses ratio causes burnout of nurse and Hospital acquired infection (28), Resource: even though resource is limited in every where its utilization practices is different from country to country. and socio economic difference b/n countries could be also the reason for this difference.

Availability of basic equipments

This study found that the odds of implementing nursing process among nurses working in a unit with availability of basic equipments were [AOR: 5.39(95%CI: 2.55, 11.38)] times higher compared to nurses working in a unit with shortage of basic equipments. The result of this study was agreed with the study in Harari and Diredawa Region General Hospitals showed that the odds of implementing nursing process among nurses working in a unit with availability of basic equipment were 3.6 times higher as compared to nurses working in a unit with shortage of basic equipment, the result of the study conducted in Addis Ababa Governmental hospitals which identified that insufficient equipment and absence of supplies and materials were the identified barriers of nursing process application (4), the study in Debre markose and Finoteselam Hospitals which showed Availability of necessary equipment for patient care in the hospitals were 3 times higher to implement nursing process than inadequate one (8).

Knowledge: The odds of implementing nursing process among nurses with high knowledge on nursing process were [AOR: 20.409 (95%CI: 7.23, 57.60)] times higher as compared to nurses with poor knowledge on nursing process whereas the odds of implementing nursing process among nurses with moderate knowledge on nursing process were [AOR: 10.85 (95%CI:4.68,25.12)] times higher compared with nurses with poor knowledge on nursing process. This result was supported by the study conducted in Addis Ababa governmental Hospitals which revealed that both highly and moderately knowledgeable nurses were positively and significantly associated with nursing process implementation in that the odds of nursing process implementation among highly knowledgeable nurses were 27 times higher than poor knowledgeable nurses whereas the odds of nursing process implementation among moderately knowledgeable nurses were 4.4 times higher compared with poor knowledgeable nurses (4), the study done in Arbaminch Hospitals to assess Determinants of nursing process implementation: highly knowledgeable nurses were 8.78 times higher to implementation of nursing process than nurses with low knowledge (6).

Patient nurse ratio :IN this study the proportion of patients that one nurse can care has significant associated with nursing process implementation in that the odds of implementing nursing process among nurses who served less than 10 patients were [AOR: 3.67 (95%CI:1.72,7.82)] times higher than that of nurses who were served more than 10 patients. This result was also supported by the following studies, Mekele Zonal Hospitals Majority (75%) of the respondent said that the nurse to patient ratio was not optimal to apply the nursing process (14), A study done in Harari and Dire Dawa regions Governmental Hospitals: Nurses who work in units (wards) with optimum nurse patient ratio were 2.5 times higher for utilization of nursing process than their counterparts (29), The study conducted among Addis Ababa Governmental Hospitals identified 54.7% of the respondents had anxiety from nurse to patient ratio (4), The study in Arbaminch general hospitals 42.85% of respondents were suffered by high patient load (6).

This study result was also supported by the study in Washington to examined the effect of patient-to-nurse staffing ratios on mortality rates and the quality of patient care in hospitals, and nurses recruitment and retention shown that higher patient-to-nurse staffing ratios were associated with higher mortality rates and greater incidence of medical complications and errors, lower job satisfaction, and more burnout among nurses.

The survey data demonstrated that nurses view understaffing as a serious problem when it comes both to the quality of care and to nurse burnout. Among nurses 59% said that the staffing level at their hospital was having a negative impact on the quality of care. Fifty four percent believed that was a very serious problem (22).

New and Timely reporting system

The odds of implementing nursing process among nurses working in units that have new and timely reporting system were [AOR:3.58 (95%CI:1.204,11.612)] times higher as compared to nurses working in work places which has no new and timely reporting system.

Even though there is limitation of study results found related to this issue, In this study among 87 nurses who reported the presence of new and timely reporting system in their working area 81(93%) were implemented nursing process this indicated that

newly and timely reporting system has positive association for nursing process implementation. This finding was also supported by the qualitative result in that weekly ,monthly, quarterly, midyear and yearly reporting systems were important for nursing process implementation. this result was also supported by the study done by Arbaminch university showed only 9.18% of respondents were dissatisfied by newly and timely reporting system (2).

Patient Disappearance /self discharge

The odds of having implemented nursing process among disappeared patients was reduced by 61.7% as compared with patients stayed until nursing process completed [AOR:0.383 (95%CI:0.181,0.813)]. This study result was in line with the study report in Debre markose and Finoteselam Hospitals in that The odds of having implemented nursing process among disappeared patients was reduced by 96%, In Harari and Dire dawa regions length of patient's stay in the hospital was significantly associated with accomplishment of nursing process. Medical records indicating patient's stay longer than 5 days in the hospitals were 7.79 times higher to have a complete nursing process document (29), The study result in Addis Ababa showed 40.6% of respondents reported that they were not able to complete the nursing care they planned because of early discharge of patients(4). This study was also supported by the qualitative study in South Africa which showed patients have negative experiences concerning the practices by health care providers (19). This similarity could be patient poor understanding of modern medicine, patients may have incurable disease and poor approach of professionals.

Supportive supervision:

The odds of implementing nursing process among nurses Who have been working in a unit with good supportive supervision were [AOR:3.217(95%CI:1.549,6.681)] times higher as compared with their counterpart. In this study among 215 nurses having good supportive supervision in their working unit 163 (75.8%) implemented nursing process this implies that good supportive supervision was important for nursing process implementation.

There is limitation of study result regarding supportive supervision in nursing process implementation. However there are supportive activities found during in-depth interview of key informants these are The establishment of nursing process committee which is organized by the Hospital management bodies ,three times per week and immediate feedback. this finding was also supported by the study report in Mekele zonal Hospitals in that (47%) of nurses reported that the administrations of the hospitals were supportive for nursing process implementation.

un clarity and bulkiness of nursing process format

From the in depth interview it explored that un clarity and bulkiness of the format affected nursing process implementation. Nursing process implementation needs clear and précised format. As most of study participants explained the format was not clear for nurses to implement nursing process. This un clarity and bulkiness of the format may reduce patient to nurse relationship , burnout of nurses ,creates negligence then decrease the quality of patient care the result was also supported by the study report in Bale zone general Hospitals showed that un clarity of the format was one of disabling factors for nursing process utilization(7)

Limitation of the study

- Since the study was cross-sectional it doesn't cover some nursing process activities which are implemented but not documented and falsely documented but not implemented.
- Nursing process is a systematic and patient center service however this study didn't considered patients as study participant.
- Consent for record review was taken from the team leaders this may break autonomy of study participants
- Since bulkiness un clarity of the format is identified qualitatively it lacks generalizability

6. Conclusion

The overall nursing process implementation among nurses working in west Amhara Referral Hospitals, northwest Ethiopia, was found to be low (61%).

Knowledge of nurses on nursing process implementation, patient to nurse ratio, disappearance/self discharge of the patient, work place supportive supervision, availability of necessary equipment's for patient care and newly and timely reporting system were factors associated with implementation of nursing process among nurses working in west Amhara Referral Hospitals.

7. Recommendations:

To staff nurses

- It could be better if the staff nurses update their knowledge.
- Improve documentation practices it will make the work visible
- patient education to reduce patient disappearance/self discharge

To nursing coordinators and hospital managers

- Better to Strengthen supportive supervision
- Scale up newly and timely reporting system or establish information dissemination system.
- To try to balance patient to nurse ratio to increase the quality of care
- Better to available the necessary equipments for patient care.

To researchers

- Better to conduct observational study because there are nursing process activities which may not be completed within short period of time.
- To conduct research involving both nurses and patients because nursing process is patient centered care thus patients have their own contribution for nursing process implementation
- Better to conduct research concerning nursing process format at national level

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9. ANNEX

Anex1 Information sheet

University of Gondar

College of Medicine and Health Science Institute of Public Health

Department of Health Economics and Health Service Management

Research title: Nursing process implementation and associated factors among west Amhara Referral Hospitals, 2017.

Name of Principal investigator: Chalie Tadie

Name of the organization: University of Gondar

Name of the Sponsor: university of Gondar

Introduction: This information sheet and consent form is prepared to explain the study you are being asked to join. Please read carefully and ask any questions about the study before you agree to join. You may ask questions at any time after joining the study. The investigator is final year Health Service Management master's graduate student from the Institute of public health, college of medicine and health science, university of Gondar.

Purpose of Research Project: The purpose of this research is to assess Nursing process implementation and associated factors among west Amhara Referral Hospitals. This study will be helpful for Hospital managers and nursing directors to be better understand the underlying issues in order to implement strategies. It also will serve as a reference for other studies.

Procedure: To assess Nursing process implementation and associated factors among west Amhara Referral Hospital. We invite you to take part in this research project. If you are willing to participate in this project, you need to understand and sign the agreement form. Then after, you will be given a self-administered questionnaire by the

data collector to give your response and. You do not need to write your name. All your responses and the data collected from you will be kept confidentially by using coding system no one will have access to your response.

Risk: By participating in this research project, you may waste 40 minutes. We hope you will participate in the study for the sake of the benefit of the research result. Other ways there is no risk in participating in this research project.

Benefits: If you participate in this research project, there may not be direct benefit to you but your participation is likely to help us in assessing nursing process implementation among west Amhara Referral Hospitals and associated factors. You will not be provided any incentives or payment to take part in this research project but we may compost your expense.

Confidentiality: The information collected from this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. And it will not be revealed to anyone except the principal investigator and will be kept locked with key.

Right to refuse : You have full right to refuse from participating in this research. You can choose not to respond to some or all questions if you do not want to give your response. You have also the full right to withdraw from this study at any time.

contact person : If you have any question, please contact the following person.

Chalie Tadie :- **principal investigator**

Phone number +251-918-049528

Email address: chadie78@gmail.com

Annex 2:- Consent form

Good morning/good afternoon!

My name is _____ I am here today to collect data on nursing process implementation and associated factors among nurses in Western Amhara Referral Hospitals. The study is being conducted by Mr. Chalie Tadie from University of Gondar, College of Medicine and Health Science, post graduate program. The aim of this study is to assess Nursing process implementation and associated factors among west Amhara Referral Hospitals. The data you provide are believed to have a great value for the achievement of this research. I confirm you that all data will be used for academic purpose and analyzed anonymously through the authorization of the University. As a result, you are not exposed to any harm because of the information you provide. This questionnaire may take 40 minutes to complete and your participation is voluntary and you are not obligated to answer any question you do not wish to answer. If you have questions regarding this study and also if you would like to be informed of the results after its completion, please feel free to contact the principal investigator.

Would you participate in responding to the questions in this questionnaire?

Yes _____ No _____ signature _____

Data collectors' name _____

Signature _____ Date _____

Annex 3:- Questionnaire

Code-----

PART. I Socio Demographic Questions

Circle your response from the given option/fill the blank space/

S/No	Items	Responses	Remark
1.	Name of hospital you work?	Hospital name _____	
2.	Sex	Male _____.1 Female_____.2	
3.	How old are you?	_____(in year)	
4.	What is your current marital status?	1.single 2.married 3.widowed 4.divorced	
5	Educational status	1) Diploma 2) first degree 3) second degree	
6	Monthly income	Birr_____	

PART- II. Work place related Questions:

	ITEM	Responses	Key
7.	work experience in clinical area?	____year and ----- months	
8	On average how many hours do you work per day?	A) less than or equal to 8 hrs B) greater than 8 hrs	
9	How many patients do you care per day?	_____	
10	Do you have Basic equipments in your organization to do nursing care?	1. Yes 2. No	
11	Have you worked over time?	1. Yes 2. NO If 'no' skip Q.NO. 12	
12	If your answer for Ques. No 14 'yes', is that with payment?	1. Yes 2. NO	
14	The greatest challenge for you during	1.poor relationship with	You can

	working time is/are?	physicians 2.poor communication coworkers 3.autocratic type of manager	choose more than one answer
15	What do you think about level of supportive supervision in your organization	1. poor 2. good	
16	What is/are the dissatisfying aspects of your job?	1.Having care for so many patients 2.the new report system 3. Rules being made up without staff	You can choose more than one answer
17	How would you describe the working atmosphere of Work place?	1.stressful at times 2.Negligent at times 3.disorganized 4. well	
18	Did you get satisfying orientation when you joined this organization?	1.Yes 2.NO	
19	What do you use to make the work visible?	1.recording every activities what you perform 2.using nursing process 3.reporting to supervisors 4.working on the patient problems & seeing the outcome	
20	Have you got on job training about Nursing process implementation	1.Yes 2. No	
21	If your answer for question number 20 is yes How many times ?	1. once 2. two times 3. three and above	

22	How patients influence your nursing process?	1.patient disappearance before completing the planned interventions 2.patients are not cooperative for the care you provide 3.inability to collect the required material for care 4.present with complicated problems that is challenging to manage	You can choose more than one answer
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PART- III. Knowledge Assessment

23.	The first step on your nursing process is?	1.Collecting subjective & objective data 2.evaluating what has been done for the patient 3.indicating the activities to be done 4.give medication
24.	The primary aim of Gordon approach is?	1.focuses on ethical principles 2.focuses on patients responses towards their illness 3. Focuses on the disease process/medical diagnosis 4. focuses on patient's attendant interest
25.	Select from the given option that is not a component of nursing process.	1.assessment 2.implementation 3.planning 4.evaluation 5.evidenced based practice 6.nursing diagnosis
26.	Your appropriate nursing diagnosis for a patient with	1.potential nursing diagnosis 2.actual nursing diagnosis

	Hypertension to prevent future complication is_____	3.medical diagnosis 4.laboratory investigation
27.	What makes nursing diagnosis different from medical diagnosis?	1.nursing dx focuses on the diseases than other patient's response 2.nursing dx focuses on patient's response than Disease process 3.both focuses on patient's responses 4.both have similar procedure to resolve a patient's
28.	In your organization who is mandatory for the better accomplishment of nursing process?	1. Physician 2. Patient's family 3.nurses 4. Patients 5.no one should excluded
29.	Select your role during implementation phase of your nursing process_____	1.propose the interventions 2.implementing the proposed interventions 3.performing the planned interventions by excluding Activity of daily living 4. Stop the phase if the initial implementations fail to Change patients' problem.
30.	Select that may be not a guide for your nursing process evaluation_____	1.the nursing diagnosis 2.collaborative problems 3.priorities and nursing interventions 4.expected out comes 5.all could be guide lines
31	Fluid volume deficits related to unresolved vomiting & diarrhea as evidenced by dry oral mucosa and sunken eyes. From the given nursing diagnosis select the etiology from the given options?	1.fluid volume deficit 2.unresolved vomiting and diarrhea 3.dry oral mucosa and sunken eyes 4.dehydration

IV. Attitude of nurse's assessment.

Score the following Attitude questions according to the order. Mark by using ' ' on your choice.

<u>NO</u>	Practice	Strongly disagree 5	Disagree 4	Neutral 3	Agree 2	Strongly agree 1
32	Do you think practice the Nursing Process Improves patient care?					
33	Do you believe a Nursing care plan should be Used for all patients admitted to hospital?					
34	I am convinced the Nursing care will work if applied in patient care					
35	Do you think using the current Nursing Process format is time consuming?					
36	Do you think that the Nursing care plan should be revised depending on the patient's condition?					
37	Do you think feedback about the Nursing Process will bring about changes to it?					
38	Do you believe work related problems will affect practice of the Nursing Process?					
39	Do you think Nursing process is valueless paper work ?					

code no -----

Part V :- Checklist to assess nursing process implementation from patient chart

S · N	Variables	Yes	No
1	Is both subjective & objective data is documented ?		
2	Is Nursing diagnosis is developed based on the standard (problem + Etiologie +sign/symptom or problem +etiology)?		
3	Is nursing care plan prepared based on the diagnosis		
4	Is nursing intervention documented ?		
5	Is evaluation recorded ?		

ለቃለ መጠየቅ የተዘጋጁ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ምርመራ
1.	አሁኑ የሚሰሩበት ሆስፒታል ስም ?	_____	
2.	ጾታ	ወንድ _____ .1 ሴት _____ .2	
3.	እድሜ	_____ (በአመት)	
4	የትምህርት ደረጃ	1. ዲፕሎማ 2. የመጀመሪያ ዲግሪ 3. ሁለተኛ ዲግሪ	

1. የሚመዘገቡ የነርስ ስራዎች ሁሉ ለበሽተኛው አገልግሎት የዋሉ ናቸው ብለው ያስባሉ ?

ምክኒያቱን በዝርዝር ያብራሩ -

2. የነርሲንግ ፕሮሰስ ክትትል ምን ይመስላል

3. ነርሲንግ ፕሮሰስ እንዳይሰራ የሚያደርጉ እንቅፋቶች ምንድናቸው ?

3.1 ከግባት ንጻር

3.1 ከሰራተኞች እውቀት እና አመለካከት አነጻጽር

I. Declaration

I, the undersigned, MPH student declared this thesis is my original work in partial fulfilment of the requirement for the degree of Master of Public Health in Health Economics.

Name: Chalie Tadie

Signature: _____ Date _____

Place of submission: Institute of Public Health, Collage of Medicine and Health Sciences, University of Gondar.

Date of Submission: _____

Advisors:

Name	Signature	Date
1. Professor Amsalu Feleke	_____	_____
2. Mr. Ayalew Debie (MPH)	_____	_____